

## AMENDMENTS TO THE CLAIMS

### In the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (currently amended) A fresh meat product, comprising:  
a meat obtained from a dark-cutting carcass having a grading pH; and,  
an amount of at least one pH-lowering agent sufficient to lower the pH of at least a portion of said meat below its pH level at grading and to lighten the color from the grading color, wherein the meat has been contacted with the at least one pH-lowering agent after onset of rigor mortis.
2. (Previously presented) A meat product according to claim 1, wherein the dark-cutting carcass comprises a beef carcass.
3. (Original) A meat product according to claim 2, wherein the at least one pH-lowering agent includes at least one acidulant.
4. (Cancelled)
5. (Previously presented) A meat product according to claim 1, wherein the dark-cutting carcass comprises a beef carcass and the at least one pH-lowering agent comprises at least one acidulant.
6. (Previously presented) A meat product according to claim 5, wherein the at least one acidulant comprises one or more of organic acids, neutral cyclic esters of gluconic acid, and sodium acid sulfate, and calcium sulfate.
7. (Previously presented) A meat product according to claim 6, wherein the neutral cyclic ester of gluconic acid comprises glucono-delta-lactone ("GDL").

8. (Cancelled)
9. (Previously presented) A meat product according to claim 6, wherein the organic acid comprises one or more of acetic acid, citric acid, fumaric acid, gluconic acid, lactic acid, malic acid, phosphoric acid, succinic acid, and tartaric acid.
10. (Previously presented) A meat product according to claim 1, wherein the pH-lowering agent comprises one or more of organic acids, GDL, and low pH phosphates.
11. (Previously presented) A meat product according to claim 1, wherein the amount of pH-lowering agent is sufficient to lower the pH of the meat below its pH level at grading of substantially all the meat.
12. (Previously presented) A meat product according to claim 1, wherein the amount of said at least one pH-lowering agent is sufficient to lower the pH of the meat below its pH level at grading at least about 0.2 pH units.
13. (Previously presented) A meat product according to claim 11, wherein the amount of said at least one pH-lowering agent is sufficient to lower the pH of the meat below its pH level at grading at least about 0.2 pH units but no more than about 1.3 pH units.
14. (Previously presented) A meat product according to claim 11, wherein the amount of said at least one pH-lowering agent is sufficient to lower pH to a value of from about pH 5.4 to about pH 6.
15. (Previously presented) A meat product according to claim 13, wherein the amount of said at least one pH-lowering agent is sufficient to lower pH to a value of from about pH 5.4 to about pH 5.9.

16. (Previously presented) A meat product according to claim 14, wherein the amount of said at least one pH-lowering agent is sufficient to lower pH to a value of from about pH 5.5 to about pH 5.8.

17-18. (Cancelled)

19. (Previously presented) A meat product according to claim 1, wherein said meat is derived from a dark-cutting bovine carcass.

20. (Previously presented) A meat product according to claim 19, wherein said dark-cutting carcass comprises a dark burgundy/purple appearance and the amount of said at least one pH-lowering agent is sufficient to alter the grading color of at least a portion of said meat to a bright cherry red typically associated with meat having a pH of from about pH 5.4 to about pH 6.1.

21. (Previously presented) A meat product according to claim 19, wherein said at least one pH-lowering agent comprises one or more of organic acids, GDL, sodium acid sulfate, calcium sulfate, and low pH phosphates.

22. (Previously presented) A meat product according to claim 21, wherein said at least one pH-lowering agent comprises at least one acidulant, and said at least one acidulant comprises one or more of organic acids, GDL, sodium acid sulfate, and calcium sulfate.

23. (Original) A meat product according to claim 22, wherein said meat has a green weight, and the amount of said at least one acidulant ranges from greater than 0% of the green weight of said meat to about 10% of the green weight of said meat.

24. (Original) A meat product according to claim 23, wherein the amount of said at least one acidulant ranges from greater than about 0% of the green weight of said meat to about 2% of the green weight of said meat.

25. (Original) A meat product according to claim 24, wherein the amount of said at least one acidulant ranges from about 0.3% of the green weight of said meat to about 0.6% of the green weight of said meat.
26. (Previously presented) A meat product according to claim 25, wherein said at least one acidulant comprises GDL.
27. (Original) A meat product according to claim 24, wherein the amount of said at least one acidulant ranges from about 0.1% of the green weight of said meat to about 0.3% of the green weight of said meat.
28. (Previously presented) A meat product according to claim 26, wherein the at least one acidulant comprises sodium acid sulfate.
29. (Original) A meat product according to claim 19, further comprising a buffering agent.
30. (Previously presented) A meat product according to claim 29, wherein the buffering agent comprises a high pH phosphate.
31. (Original) A meat product according to claim 29, wherein the pH of the meat is between pH 5.5 and 5.9.
32. (Original) A meat product according to claim 30, wherein the pH of the meat is pH 5.7.
33. (Previously presented ) A meat product according to claim 21, wherein the at least one acidulant comprises at least two acidulants, and the at least two acidulants are together present in an amount sufficient to alter the grading color of at least a portion of said meat.

34. (Previously presented) A method of treating meat, comprising: identifying meat in a dark-cutting carcass and after onset of rigor mortis contacting said meat derived from said dark-cutting carcass with an amount of at least one pH-lowering agent, wherein the meat has a grading pH and grading color, and the amount of pH-lowering agent is sufficient to lower the pH, pH and to lighten the color from the grading color, ~~or both~~ of at least a portion of said meat.
35. (Previously presented) A method according to claim 34, wherein the at least one pH-lowering agent comprises at least one acidulant.
36. (Previously presented) A method according to claim 35, wherein the grading color comprises a dark burgundy/purple and the amount of the at least one acidulant is sufficient to redden at least a portion of said meat.
37. (Previously presented) A method according to claim 35, wherein the grading pH ranges from about 6.3 to about 6.7.
38. (Previously presented) A method according to claim 37, wherein the at least one acidulant comprises one or more of organic acids, GDL, sodium acid sulfate, and calcium sulfate.
39. (Previously presented) A method according to claim 38, wherein the process further includes tumbling said meat.
40. (Previously presented) A method according to claim 34, wherein said contacting comprises injecting said meat with a brine solution comprising said at least one pH-lowering agent.
41. (Previously presented) A method according to claim 34, wherein said contacting comprises marinating said meat in a brine solution comprising said at least one pH-

lowering agent.

42. (Previously presented) A method according to claim 34, further comprising a drip/rest period.

43. (Previously presented) A method according to claim 34, further comprising packaging said meat.

44. (Previously presented) A method according to claim 34, wherein said at least one pH-lowering agent comprises an encapsulated form.

45. (Previously presented) A method according to claim 34, further comprising contacting said meat with a buffering agent.

46. (Previously presented) A method according to claim 45, wherein the amount of said buffering agent is sufficient to eliminate or reduce residual activity of at least one of said at least one pH-lowering agents in said meat.

47. (Previously presented) A method according to claim 45, wherein said buffering agent comprises a phosphate solution.

48. (Previously presented) A method according to claim 34, further comprising contacting said meat with one or more ingredients suitable for accelerating the action of at least one of said at least one pH-lowering agents.

49. (Previously presented) A method according to claim 48, wherein the one or more ingredients suitable for accelerating the action of at least one of said at least one pH-lowering agents comprises one or more of erythorbate and ascorbic acid.

50. (Previously presented) A method of treating meat, comprising: identifying a bovine carcass as a dark-cutting bovine carcass and after onset of rigor mortis contacting

meat derived from said dark-cutting bovine carcass with an amount of at least one pH-lowering agent, wherein the meat has a grading pH and grading color, and the amount of pH-lowering agent is sufficient to lower the ~~pH~~, pH ~~and to~~ lighten the color from the grading color, ~~or both~~ of at least a portion of said meat.

51. (Previously presented) A method according to claim 50, wherein the at least one pH-lowering agent comprises at least one acidulant.

52. (Previously presented) A method according to claim 51, wherein the grading color comprises a dark burgundy/purple and the amount of the at least one acidulant is sufficient to redden at least a portion of said meat.

53. (Original) A method according to claim 50, wherein the grading pH ranges from about 6.3 to about 6.7.

54. (Previously presented) A method according to claim 51, wherein the at least one acidulant comprises one or more of organic acids, GDL, sodium acid sulfate, and calcium sulfate.

55. (Original) A method according to claim 53, wherein the process further includes tumbling said meat.

56. (Previously presented) A method according to claim 50, wherein said contacting comprises injecting said meat with a solution comprising said at least one pH-lowering agent.

57. (Previously presented) A method according to claim 50, wherein said contacting comprises marinating said meat in a solution comprising said at least one pH-lowering agent.

58. (Previously presented) A method according to claim 50, further comprising a

drip/rest period.

59. (Previously presented) A method according to claim 50, further comprising packaging said meat prior to contacting said meat with said pH-lowering agent.

60. (Previously presented) A method according to claim 50, further comprising packaging said meat after contacting said meat with said pH-lowering agent.

61. (Previously presented) A method according to claim 50, wherein said at least one pH-lowering agent comprises an encapsulated form.

62. (Previously presented) A method according to claim 50, further comprising contacting said meat with a buffering agent.

63. (Previously presented) A method according to claim 62, wherein the amount of said buffering agent is sufficient to stabilize the pH in said meat at a pH below the grading pH.

64. (Previously presented) A method according to claim 62, wherein said buffering agent comprises a phosphate solution.

65. (Previously presented) A method according to claim 50, further comprising contacting said meat with one or more ingredients suitable for accelerating the action of at least one of said at least one pH-lowering agents.

66. (Previously presented) A method according to claim 64, wherein the one or more ingredients suitable for accelerating the action of at least one of said at least one pH-lowering agents comprises one or more of erythorbate and ascorbic acid.

67. (Previously presented) A meat product according to claim 1, wherein the meat product is cooked.



68. (Cancelled)

69. (Previously presented) A method according to claim 34, further comprising cooking the meat product after contacting said meat derived from said dark-cutting carcass with an amount of at least one pH-lowering agent.

70. (Previously presented) A method according to claim 50, further comprising cooking the meat product after contacting said meat derived from said dark-cutting bovine carcass with an amount of at least one pH-lowering agent.